INTERNATIONAL OSOYOOS LAKE BOARD OF CONTROL

Annual Meeting

October 7, 2015, 1:00 - 4:00 PM PDT

BOARD MEMBERS

Cindi Barton Chair, U.S. Section Bruno Tassone Chair, Canadian Section Col. John Buck Board Member, U.S. Section Kris Kauffman Board Member, U.S. Section John Arterburn Board Member, U.S. Section Ford Waterstrat Board Member, U.S. Section **Anna Warwick Sears** Board Member, Canadian Section Sue McKortoff Board Member, Canadian Section Board Member, Canadian Section Glen Davidson Brian Symonds (absent) Board Member, Canadian Section

BOARD STAFF and BOARD MEMBER ASSISTANTS

Marijke van Heeswijk Secretary, U.S. Section
Gwyn Graham Secretary, Canadian Section

Sara Marxen Technical Assistant to Col. John Buck

GUESTS

Gordon Walker (IJC Chair, Canadian Section), Rich Moy (IJC Commissioner, U.S. Section), David Fay (IJC Engineering Advisor, Canadian Section), Mark Colosimo (IJC Engineering Advisor, U.S. Section), Al Josephy (Washington State Department of Ecology), Sean Reimer (BC Ministry of Forest, Lands and Natural Resource Operations)

INTRODUCTIONS and APPROVAL OF THE AGENDA

Meeting commenced at 1:20 pm with Canadian Chair and IJC Commissioners welcoming new Board members.

The meeting agenda was accepted without change.

BOARD EXPANSION

The following four new Board members were appointed by the IJC prior to the 2015 Annual Board meeting:

Canadian Section: Anna Warwick Sears (Executive Director, Okanagan Basin Water Board) and Sue McKortoff (Mayor, Town of Osoyoos).

U.S. Section: John Arterburn (Senior Fisheries Biologist, Confederated Tribes of the Colville Reservation) and Ford Waterstrat (President, Lake Osoyoos Association).

The Canadian Chair led a review of the Board's function and mandate, referring to the IJC Directive to the Board and the Board's compliance and oversight role regarding the operation of Zosel Dam by Washington State Department of Ecology (defined as the Applicant), as specified in the IJC Order of Approval.

BUSINESS FROM PREVIOUS MEETING(s)

The Board reviewed of action items from previous Board meetings, as follows:

Action 1: Applicant to provide Board with draft guidance regarding proposed ramping rate targets for Zosel Dam.

Status: In progress.

Action 2: Board to seek input from other IJC International Watershed Initiative (IWI) Boards on experience of transition to the IWI format.

Status: Completed. On February 23, 2015, the Board conducted a conference call with selected IJC Boards whose membership has recently been expanded under the IWI model, to gain information on the transition process.

Action 3: Provide copy of approved Board work plan on the website

Status: Completed. The IOLBC Secretaries have posted the 2014-15 work plan to the IOLBC website.

Action 4: Develop criteria and call for public submission of photos for Board website.

Status: Completed. The IOLBC approved criteria for public photo submissions to the IOLBC website. This was posted to the website ahead of the 2015 Osoyoos Lake Water Science Forum, where the Board made the call for public submission of photos as part of the annual public meeting.

Action 5: Revise webpage titles to improved access to Board documents.

Status: Completed

Action 6: Consider adding a webcam at Zosel Dam.

Status: In progress.

Action 7: Consider submitting a proposal to the IJC International Watershed Initiatives fund to develop an operations model for Zosel Dam.

Status: Completed. IOLBC decided against submitting a funding request at this time given Washington State Dept. of Ecology's willingness to develop a model with input from the U.S. Army Corps of Engineers, Seattle District.

STANDING ITEMS

IOLBC 2015-16 Work Plan

Board secretaries provided an overview of the draft IOLBC 2015-2016 work plan. Updates for 2016 include reviewing the process and outcomes of the 2015 Condition 10 variance to operate to drought conditions, review of the operating guidelines and procedures for Zosel Dam, review and implementation of the communications plan, enhanced engagement with Tribes and First Nations, enhanced public outreach, and project implementation of the IJC co-funded educational documentary on transboundary water management in the Okanagan/Okanogan.

Communication Strategy

An overview and update of the IOLBC communications strategy was discussed, including recent updates that have been made to the Board website. This includes revised webpage headers for Board documents (for more intuitive access), updates to the records of previous Board meetings (including quarterly conference calls), updates to the Lake-Level Status and Trends webpage, posting of the advisory of temporary variance for drought conditions, and posting of an invitation to the public for submission of photographs for use in the website.

IJC Strategic Initiative – IOLBC proposals (update)

The IJC agreed to fund a previously-submitted IWI proposal by the IOLBC for production of an educational documentary on transboundary water management in the Okanagan/Okanogan watershed, to be led by the Washington State Department of Ecology. The IJC also agreed to fund the IOLBC proposal to support the 2015 Osoyoos Lake Water Science Forum, with funds directed to the Okanagan Basin Water Board towards implementation of this event.

Review of Correspondence

Key items of correspondence, as received by the Board over the past year, were reviewed. These included:

- a letter from the Okanagan Basin Water Board (OBWB) on the issue of preventing the introduction and spread of invasive species, particularly zebra and quagga mussels into the Okano(a)gan system,
- communications between BC and WA regarding early indicators of low water supply,
- communication from the IOLBC to the IJC with recommendations towards approval of a Condition 10 variance under the Order for adaptive management during drought conditions, and
- communication from the IJC to new Board members, announcing their appointments to the Board.

COMPLIANCE WITH IJC ORDER

Hydrologic Conditions in 2015

The U.S. Board Secretary provided an overview presentation of hydrologic conditions in 2015, which was described as the year of the "double whammy," due to below average snowpack accumulation followed by an extended period of warm and dry weather through the spring and summer months. These effects were generally experienced earlier and more deeply on the U.S. side of the basin. The Board did not issue a drought declaration under the IJC Orders in 2015 because conditions did not trigger the Okanagan Lake drought criterion specified in the 2013 Supplementary Order. The Similkameen River drought criterion in the Order did trigger, but both Okanagan Lake and Similkameen River triggers are required for an IOLBC drought declaration and this did not happen. With the unusually warm and dry spring and summer weather, however, Okanagan Lake levels declined earlier than anticipated, leading to concerns about diminishing inflows to Osoyoos Lake and possible difficulties in maintaining lake levels required by the 2013 Supplementary Order. The Board recommended that the IJC grant a temporary variance to the Applicant to allow more leeway in adaptive management of the lake levels. The IJC approved a variance under Condition 10 of the Order, allowing the Applicant to operate within the upper and lower bounds as per drought conditions.

Compliance with IJC Orders

There have been no exceedances of the IJC rule curve to date (October 7) in 2015 and none are anticipated for the remainder of the year.

Board members indicated interest in further discussion in implementation of Condition 10 variances and whether there might be opportunities for earlier anticipation and implementation of such measures in the future.

Board members discussed drought management actions on both sides of the border, including information indicating that the upper Okanogan (in U.S.) was closed to further water-right allocations in 1976. During the summer of 2015, about 1,000 water-right holders in the U.S. portion of the Okanogan River basin were informed of interruption of their water rights.

The Board expressed appreciation of the real-time compliance hydrograph for outreach purposes and the secretaries committed to providing links to historical compliance hydrographs on the IOLBC website starting with the year 2013.

ZOSEL DAM OPERATIONS UPDATE

The Applicant to the IJC Order, Washington State Department of Ecology (WADOE), provided an update and information on management of Zosel Dam. In response to the Okanagan Basin Water Board (OBWB) letter regarding invasive mussels, it was indicated that WADOE issues permits for invasive species mitigation/control activities but is not mandated to develop prevention plans. Instead, this falls

under the mandate of the Washington Department of Fish and Wildlife (WADFW). A program is currently in place, which includes a rapid response component (website link will be provided to IOLBC). It was also indicated that a standing permit is in place at present (2015) for application of a biological control agent against zebra/quagga mussels (ZEQUANOX®), which is registered for use in Washington State waters. Highway inspections (boat transport) are also part of the WADFW program and there is close collaboration with Idaho and Oregon programs (an alert hotline is in place).

The Board noted that the letter sought greater information about potential measures that the Applicant might undertake to assess potential occurrence and impact to the actual structure of Zosel Dam and what mitigation measures might be applied in the event of invasive mussel occurrence.

On the subject of setting operational targets, the Applicant noted that Zosel Dam operations reflect both the IJC rule curve and the downstream flow needs. The Applicant tries to maintain Okanogan River flows downstream from Zosel Dam at or above 200 cubic feet per second (cfs).

In anticipation of another winter with "snowpack drought" conditions, the Applicant plans to maintain 2015-16 winter water levels at 910.5 ft, rather than 909.5 ft, as has been done in recent years.

Zosel Dam operational objectives are as follows (not necessarily in order of priority):

- Maintain adherence to the IJC Order by attaining required lake levels
- Protect non-interruptible water rights in the Okanogan River (U.S.)
- Protect adjudicated water rights (U.S.)
- Work with fisheries organizations on both sides of the border to adjust operations as needed where and when feasible
- Maintain the facilities on and around Zosel Dam

Maintenance at Zosel Dam consists of the following:

- 1. Ongoing Maintenance (following the Oroville-Tonasket Irrigation District Operations and Maintenance Manual)
- 2. Annual Maintenance Plan
 - a. Gate Cycling
 - b. Verifying limit switches operation
 - c. Preventative maintenance on gates (lubrication, inspection)
 - d. Reseal limit switch boxes
 - e. Inspection of all mechanical systems
 - f. Visual gate and seal inspection
 - g. Documentation (report and photos)
- 3. One-time Maintenance items (2015)
 - a. Repair of drive couplers to threaded rods
 - b. Seal limit switches, add weather seals, move grounding wires
 - c. Clean and re-lubricate lifting stems
 - d. Reconfigure limit switches
 - e. New spare lifting nuts in two locations

The Applicant provided information on the installation of a Biomark ™ Fish Counter at Zosel Dam and reviewed results of a channel survey, which identified significant sediment (silt) deposition at the mouth of Tonasket Creek due to large rain events in March 2015. WADOE identifies a potential risk for silt accumulation against the dam should this sediment migrate towards the dam. WADOE is planning a channel survey to measure baseline conditions and monitor potential additional sediment accumulation. Currently (2015) the sediment risk to the dam is considered low.

The U.S. Army Corps of Engineers provided a brief overview of collaborative work with WADOE on plans to develop an operational model to assist in the efficiency of Zosel Dam operations.

The Board commended both the Applicant and BC government staff involved in Okanagan River System operations for their excellent collaboration during a challenging year, indicating that the respective groups successfully managed the severe drought conditions for fisheries management and other water use interests.

The Applicant indicated that early September is a period of critical streamflow needs that may require lake level reductions below 911.5 ft. This is a challenge given the community's interest in maintaining stable lake levels throughout the summer and early fall. The Board was informed that maintaining the balance between these competing needs was narrowly achieved in 2015.

The Board noted a need for improved clarity on why water is stored in Osoyoos Lake (explaining the water-management objectives and multiple needs) and the importance of a management process in the event of a longer-term drought.

REVIEW OF PUBLIC MEETING PRESENTATION

The Board reviewed the presentation for the public meeting. Minor changes were made to the draft presentation.

ADJOURN

Meeting adjourned at 4:55 pm

SUMMARY OF NEW ACTION ITEMS

- 1. The secretaries will edit the Board work plan to include new Board members
- 2. The secretaries will edit the Board website to include new Board members.
- 3. The secretaries will prepare a review of the Condition 10 implementation process that occurred in 2015.
- 4. The Applicant will provide the secretaries with a website link for the WADFW invasive species rapid response program and this link will be posted on the IOLBC website.
- 5. The Applicant will draft a response to the OBWB letter, which recommends invasive mussel response action measures for Zosel Dam. The secretaries will assist the Applicant with the response.